

thesia of the first and second divisions wears off, perhaps completely, in from ten minutes to an hour, though the third division remains totally anesthetic. In such a case pain is liable to recur after two months or two years, as in a case of ordinary injection of a nerve. With total destruction of the ganglion there is the same liability to keratitis as with the operation of gasserectomy, but if the lids are kept carefully closed by strapping for the first week and the conjunctival sac washed out with boracic lotion twice a day, there will be little or no trouble. Hutchinson's partial gasserectomy avoids the danger of keratitis but is not a certain permanent cure, as Harris has seen three such cases relapse with neuralgia. In almost every case, as soon as anesthesia develops from the injection, the neuralgic pains cease, and they can no longer be started by any chewing movements or rubbing the face. The duration of the cure rarely lasts less than twelve months, if good anesthesia has been obtained, and in the majority the relief of pain lasts from two to three years. Very many of Harris' cases have been free for four or five years, one six and a half years, another seven years, another nine years after nerve injection only. No trophic effects on the skin are ever seen. Keratitis is a risk if the cornea is anesthetic after injection of the ganglion, but this may always be avoided by proper precautions.

THERAPEUTICS

UNDER THE CHARGE OF

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A Collective Investigation of 10,000 Recruits with Doubtful Heart Conditions.—Report IV. Compiled by S. R. WELLS (*British Med. Jour.*, May 29, 1920, p. 730). The following is the author's summary: Taking aortic regurgitation and mitral stenosis as the two typical valvular lesions which can be diagnosed with comparative certainty during life, the results of the present statistical inquiry lead us to the following conclusions: (1) The most important etiological factor in the production of organic lesions of the heart valves in men between the ages of eighteen and forty-one is rheumatic fever. (2) Strain can independently produce aortic regurgitation. (3) While strain may be a cause of mitral stenosis, it is a much less important factor than in the production of aortic regurgitation. (4) There is a third agent giving rise to symptoms simulating influenza, which is an efficient cause of mitral stenosis, and can possibly affect the aortic valves as well, but is not nearly so likely to do so. We have been unable to find any statistical evidence that syphilis, scarlet fever, diphtheria, pneumonia, or gonorrhea, are causes of valvular lesions, nor can we find statistical evidence that a history of

growing pains points to affections productive of valvular lesions. The same may be said, with slight reservations, of a history of rheumatism where there is no clear account of pain, swelling of the joints, fever, or confinement to bed. The evidence in favor of chorea as an efficient cause of mitral stenosis is strong, and we have found some, though not very striking, evidence in confirmation of the view that chorea and rheumatic fever are both manifestations of the activity of a common cause.

Experiences with Luminal in Epilepsy.—GRINKER (*Jour. Am. Med. Assn.*, 1920, lxxv, 588) found luminal in small doses (1.5 to 2 grains), once or twice daily, capable of arresting the convulsions of epilepsy. Larger doses are seldom required but may be given with safety. Large doses may be administered when beginning treatment, especially after sudden withdrawal of bromide treatment; even in such cases the dose may be gradually reduced to 1.5 to 2 grains. Luminal does not appear to be habit-forming and no harmful effects have been observed from its long-continued administration. Patients receiving average doses of luminal do not show the peculiar mental torpor of those taking bromides.

The Physiological Action of Fumes of Iodin.—LUCKHARDT, KOCH, SCHROEDER and WEILAND (*Jour. Pharm. Exp. Therap.*, 1920, xv, 1). Iodin deposited on the skin in the form of fumes is absorbed and appears in the urine of both man and dogs. In dogs the iodine content of the thyroid was found to be greatly increased, the increase being accompanied by a corresponding change in the histological features of the gland. The same was true when the iodine was inhaled. The inhalation of iodine fumes causes respiratory disturbances consequent on the irritant action of the fumes; large amounts lead to the death of the animal within twenty-four hours from acute and rapidly developing pulmonary edema. The edema supervenes more rapidly in animals having respiratory disease than in normal dogs. The authors believe that the fumes of iodine should never be inhaled for therapeutic purposes and in persons with pulmonary disease such administration is absolutely contra-indicated.

The Stability of Digitalis-leaf Extracts. The Infusion (Second Paper).—POMEROY and WEYL (*Am. Jour. Pharm.*, 1920, xcii, 394). A comparison of the relative activity of digitalis infusions and tinctures of equal concentration shows the infusion to be slightly less active. Placing a 20 per cent. limit on deterioration, the authors conclude that the infusions should be discarded in from three to five days' time; at lower temperatures the time limit may be extended to from six to seven days. In addition to the instability of the infusion itself, a wide variation in the strength of various samples of leaves was found. The addition of alcohol did not add to the stability of the infusion.

Botulism from Canned Ripe Olives.—EMERSON and COLLINS (*Jour. Clin. and Lab. Med.*, 1920, v, 559). Within the last six months there have been at least five small outbreaks of botulism in this country, due to the eating of canned ripe olives. Four of the five outbreaks were due to *B. botulinus* of the Boise Type (Type A). While Dickson's